

Female fertility after colorectal surgery for familial adenomatous polyposis (FAP)

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Background & aims

Most familial adenomatous polyposis (FAP) patients have a prophylactic colectomy before age 30.

In ulcerative colitis patients, reduced fertility is observed more frequently after a proctocolectomy with ileoanal pouch anastomosis (IPAA), compared to an ileorectal anastomosis (IRA) procedure.

Few studies focused on fertility problems in FAP patients.

Aims of this study:

- To describe postoperative fertility problems in female FAP patients
- To investigate the association between self-reported fertility problems and surgery-related factors.

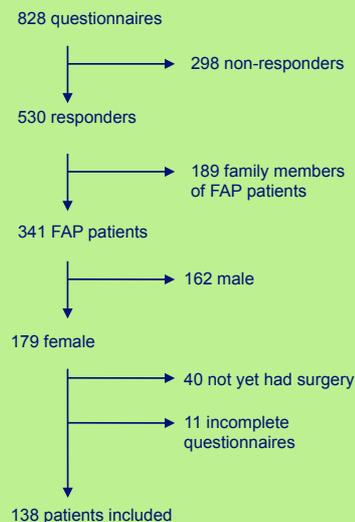
Methods

A questionnaire addressing sociodemographic, clinical and psychosocial issues was sent to FAP patients and their relatives, registered at the Dutch Polyposis Registry.

Inclusion criteria: women with an established diagnosis of FAP, who had undergone colectomy.

Specific questions included type and number of surgical procedures, whether or not fertility problems due to surgery for FAP had been experienced, and the actual desire for children.

Figure 1 Study design



Results

Figure 2 Self-reported fertility problems

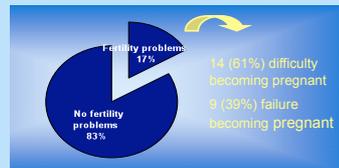


Figure 5 Relation of type of last surgery and fertility problems

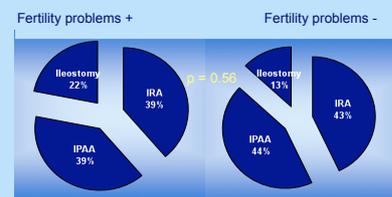


Figure 3 Sociodemographic data

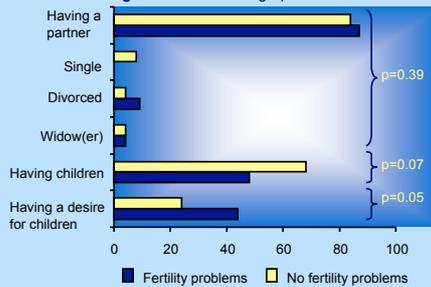
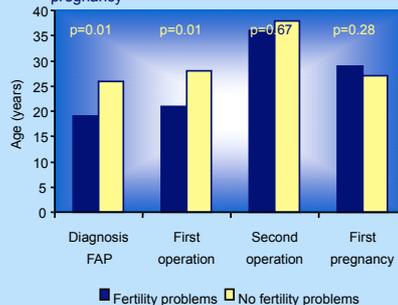


Table 1 Relation of various surgery- and FAP associated factors with self-reported fertility problems

Variable	p-value
Indication for surgery <i>Prophylactic / cancer</i>	1.00
Number of operations <i>One / more than one</i>	0.37
Surgical complications <i>Yes / no</i>	0.22
Desmoid tumor <i>Yes / no</i>	0.50
Cancer <i>Yes / no</i>	0.73
Comorbidity <i>Yes / no</i>	0.81

Figure 4 Age at diagnosis FAP, surgery and pregnancy



Summary & Conclusions

17% of female FAP patients reported fertility problems due to colectomy.

Fertility problems occurred evenly after IRA, IPAA and colectomy with ileostomy.

No association between surgery-related factors (indication for surgery, number of operations and number of procedures with complications) or FAP-related factors (desmoid tumors, cancer, other co-morbidity) and self-reported fertility problems.

More postoperative fertility problems among women who had a diagnosis of FAP and the first surgical procedure at a young age.

Acknowledgments

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